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# PENNFUTURE'S E<sup>3</sup> TIMELY ISSUES ABOUT PENNSYLVANIA'S ENVIRONMENT, ENERGY & ECONOMY

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## Healthy Shopping Credits: Critical to a Fair Opportunity for Renewable Electricity

In the last edition of E3, we discussed the importance of healthy shopping credits to the development of a competitive market for electricity. In this edition, we will see that a healthy shopping credit is critical to providing greener electricity with a fair opportunity in a competitive market.

"Green" or renewable electricity is selling well in Pennsylvania, a state with no historic or current public subsidies of energy conservation or renewable energy development. This is a surprise to some who expected a more robust green electric market in California, a state with a long history and current public subsidies for renewable energy development and energy conservation. California may be Golden, but it is the Keystone State that is Green.

What explains green power's greater success in Pennsylvania? A big part of the answer is the difference in the way the shopping credit is established and stranded costs are recovered in each state. Pennsylvania has much higher shopping credits than California, providing a fairer opportunity for green electricity to compete.

In a competitive market, a shopping customer pays nothing to the former monopoly utility for the electricity no longer being purchased. The shopping credit would equal the full, unbundled price of generation not paid to the former monopoly utility because a customer no longer purchases generation service from the utility. As long as stranded costs are being collected through a Competitive Transition Charge (CTC), however, a shopping customer continues to pay something for the electricity no longer being purchased from the utility. In Pennsylvania, a shopping customer paying a CTC continues to pay the former monopoly utility for coal or nuclear generation, even if that customer chooses to buy greener electricity. In Pennsylvania, as well as every other state requiring stranded cost recovery, customers choosing green electricity nevertheless are required to subsidize coal and nuclear generation.

The difference in Pennsylvania is that CTCs have been kept low enough and shopping credits maintained high enough to permit customers to make a reasonable financial decision to choose greener electricity. Pennsylvania's financial barrier to renewable energy is much lower than California's because Pennsylvania's shopping credits are much closer to the utilities' unbundled rate for generation service.

Most people don't realize that the price of a 100% renewable product purchased in Pennsylvania today costs *less* than consumers have been paying under regulated rates for electricity produced mainly from coal and nuclear fuels.

A shopping credit that is closer to the unbundled cost of generation supports customers choosing to purchase renewable energy without subsidy. It is simple to illustrate this conclusion with three hypothetical scenarios that are based on actual market experience in Pennsylvania.

## **SCENARIO ONE**

A consumer can purchase a 100% renewable product for 6.8 cents/kWh or a 50% renewable product for 5.39 cents/kWh, including the cost of transmission. Adding 5.55 cents/kWh to pay for distribution. a consumer can purchase a 100% renewable product and pay a total price for electricity of 12.35 cents/kWh. That's a savings of 1.85 cents/kWh compared to a bundled price of 14.2 cents/kWh before customer choice. A consumer can purchase the 50% renewable product and save 3.26 cents/kWh. This is the market that consumers and sellers of renewable generation would face today if consumers were given their full shopping credit equal to the unbundled cost of generation. It certainly reflects a market in which renewable energy is cost competitive without subsidy. While market prices may change, it is the situation that will exist once the CTC no longer is collected and the full shopping credit is made available to consumers.

### **SCENARIO TWO**

A second scenario illustrates that redirecting a portion of the unbundled cost of generation from the customer's shopping credit to the utility's CTC makes it less financially attractive for a consumer to choose to purchase renewable energy. Assume that the shopping credit for generation and transmission is reduced from 8.65 cents/kWh to 5.65 cents/kWh, because 3.0 cents/kWh of the unbundled cost of generation is instead paid to the utility as a CTC. A customer may purchase the same 100% renewable product as in the first example, but would pay a total price of 15.35 cents/kWh. That price is 1.15 cents/kWh, or 8% more than the bundled rate. Some customers would choose not to purchase the 100% renewable product. However, even with the same shopping credit of 5.65 cents/kWh and a CTC of 3.0 cents/kWh, a customer still is able to choose the 50% renewable product and pay a total price for electricity that is a bit lower than the embedded price of utility generation.

This second scenario reflects the Pennsylvania approach. The utility collects the CTC, reducing the shopping credit and the competitive opportunity for renewable energy, but the shopping credit is sufficiently maintain to permit a financial opportunity for renewable energy to compete.

#### **SCENARIO THREE**

A third scenario is based on the California approach setting the shopping credit equal to an administratively assumed market price of generation. If the shopping credit is reduced to 3.7 cents/kWh while the CTC has been increased to 4.4 cents/kWh, a consumer purchasing the same 100% renewable product would pay a total delivered price of 16.75 cents (6.8 + 5.55 + 4.4), or 2.55 cents/kWh more than the bundled rate. Strikingly, even though the price of the renewable product is 1.85 cents less than price of generation in bundled rates, the California approach to the shopping credit requires a consumer to pay a hefty premium for choosing a renewable product

A consumer's financial opportunity to purchase renewable generation is limited as the customer's shopping credit is reduced below the unbundled cost of generation in present rates. It is no wonder that Pennsylvania, with healthy shopping credits, has a more vibrant market supporting renewable energy than California.

In the next issue we will examine the ways that policy makers can make shopping credits that are as close as possible to the utility's unbundled generation.